



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

**OFFICE OF
ENVIRONMENTAL
CLEANUP**

MEMORANDUM

DATE: March 22, 2016

SUBJECT: Draft Source Control Decision & No Further Action Determination
Brazil Motors and Controls, Inc.
ECSI #1029
January 29, 2016

FROM: Eva DeMaria, Remedial Project Manager

THRU: Davis Zhen, Manager, Site Cleanup Unit 2

TO: Alex Liverman, Portland Harbor Stormwater Coordinator

Following are the United States Environmental Protection Agency's (EPA) comments on the January 29, 2016 Draft Source Control Decision (SCD) and No Further Action (NFA) memorandum, prepared by the Oregon Department of Environmental Quality (DEQ) regarding the Brazil Motors and Controls, Inc. site (ECSI #1026), located at 4315 NW St. Helens Road in Portland, Oregon (Site). The property is located in the uplands of the Guilds Lake GeoRegion, approximately 2,500 feet inland from RM8.4W and comprises 1.4 acres including a forested slope, gravel lots, and a warehouse. DEQ's Portland Harbor Upland Source Control Summary Report (November 21, 2014) gave the site a "Low" priority related to uncontrolled stormwater and shallow soils contaminated with PCB and metals. The "Low" ranking was followed by a soil removal and decommissioning of the onsite storm drain to control runoff from the site.

EPA understands the objective of the memorandum was to present the basis for DEQ's proposed source control decision at the Site. DEQ's SCD/NFA memorandum concludes that this property is adequately characterized, soil removal eliminated the potential for stormwater to transport contaminants from the Site, and that the Site does not appear to be a current or reasonably likely future source of contamination to the Willamette River. DEQ has excluded the groundwater pathway from the source control evaluation based on a low potential for contaminants in soil to impact groundwater and the distance of the site from the Willamette River.

General Comments

1. Data gaps in site characterization identified by EPA include the following:
 - a. EPA recommends that DEQ consider additional characterization of stormwater including observations and sampling of stormwater runoff at the Site. If sheet flow is found to occur at the Site, stormwater sampling should be performed conforming to section D.5 of the Joint Source Control Strategy (JSCS) guidance.
 - b. Contaminants remaining in soil at the Site have the potential to leach and impact groundwater based on concentrations exceeding soil screening levels, uncertainties in the

depth to groundwater, and the potential for increased infiltration of stormwater at the gravel backfilled excavation area. No boring wells or monitoring wells were installed to determine the depth to groundwater and contaminant concentrations in groundwater beneath the Brazil property. EPA agrees that the lines of evidence presented in the draft SCD/NFA, which include an estimation of depth to groundwater at an adjacent property, limited mobility of contaminants in soil, and distance to the river, indicate a low potential for impacts to the river via the direct groundwater discharge pathway. However, EPA recommends that DEQ consider evaluation of groundwater at the Site because of the potential for residual contaminants in soil to leach and affect groundwater. Per JSCS Section 5.2, an evaluation of the groundwater pathway should include evaluation of potential preferential pathways such as utility line backfill and stormwater lines located below the water table that may result in groundwater discharge to the river.

2. The soil screening evaluation and data presentation should be further developed to support the decision that no source control measures are needed at the south lot. Tables 1 through 3 indicate that contaminant concentrations in soil samples collected from the south lot exceed Portland Harbor screening level values (SLVs) for certain contaminants at each sampling location (DP-8, DP-9, DP-11, DP-12, and DP-13), including exceedances for arsenic, lead, total polychlorinated biphenyls (PCBs), and Bis(2-ethylhexyl)phthalate. The SCD compared soil contaminant concentrations with the DEQ upland site rank order curves for stormwater sediments (Appendix E of the DEQ Guidance for Evaluating the Stormwater Pathway at Upland Sites) as a line of evidence in the source control evaluation. However, rank order curve charts were not presented in the SCD/NFA memorandum to support this evaluation. The JSCS SLVs and Portland Harbor Preliminary Remediation Goals (PRGs) should be used as criteria to evaluate source control. If the rank order curves are to be used in the source control evaluation, the use should be a supporting line of evidence. The rank order curves are not meant to supersede SLVs or PRGs. Rank order curve data should be included in the source control evaluation to document this line of evidence supporting the SCD.
3. Characterization of surficial soil in the south lot is limited and may not be sufficient to support the decision that source control measurements are not needed in the south lot. Because stormwater generally interacts with surface soil, it is important that soil in the upper few inches be tested for stormwater contaminants of concern. Soil samples were collected at seven locations in the south lot. Tables 1 through 3 indicate that only one location included sample collection in the upper 6 inches of soil [DP-12(0-1)], five of the locations included sample collection below a depth of 6 inches, and one sample (SS-2) had no indication of the sample depth. Soil concentrations for the stormwater source control evaluation for the south lot are likely biased low because most of the samples were collected below a depth of 6 inches. As an example, the soil removal for the north lot was based upon soil data that showed contaminant concentrations were significantly higher in the soil samples collected from the surface than from samples collected below 6 inches.

4. The historic and current status of onsite stormwater conveyance features need clarification both within text and figures. Section 4.2.3 describes an “existing stormwater line” while Section 4.3.1. describes “a single north lot trench drain and catch basin to a non-functioning conveyance pipe.” It is EPA’s understanding that the aforementioned are one and the same and that it has been cut, capped, and filled. Also see Specific Comment #1.

Specific Comments

1. Section 2.0, Site Description, second paragraph – The description of the surface water flow at the property is unclear. The text describes a natural drainage feature and a concrete channel routing stormwater flow to the City of Portland piped conveyance system at inlet AMZ 188 and references Figure 2 of the memorandum. Figure 2 only shows a “drainage ditch” on the property that is routed to a City of Portland storm drain input in a different location than AMZ 188. No natural drainage feature or concrete channel is shown on Figure 2 or any other figure in the memorandum. EPA recommends clarifying the onsite stormwater conveyance features and connections to the City of Portland storm drain in the text and clearly showing these on Figure 2.
2. Section 4.2.1 Nature and Extent of Contamination –EPA recommends that the SCD/NFA memorandum expand the information on the discovery of the roadway contaminants, including the other sampling conducted in 2012 (see section 3). The expanded information should provide a comparison of the roadway contaminants to onsite contaminants in the VCP Report, the location of these discovered contaminants illustrated on a map, and a brief summary of their potential to contribute to contaminant transport from the Site to the river.
3. Section 4.3.1, Lines of Evidence Evaluation - last paragraph: The text states that stormwater infiltrates on Site in the recently filled bed of clean gravel. The SCD should provide documentation that the fill meets DEQ Clean Fill Criteria and Portland Harbor PRGs.